

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
20 October 2005 (20.10.2005)

PCT

(10) International Publication Number  
**WO 2005/096805 A2**

(51) International Patent Classification<sup>7</sup>: **A01H 5/00**

(21) International Application Number:  
PCT/BR2005/000041

(22) International Filing Date: 28 March 2005 (28.03.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/560,227 6 April 2004 (06.04.2004) US

(71) Applicant (for all designated States except US): **ALELLYX S.A.** [BR/BR]; Rua James Clerk Maxwell, 320, Techno Park (Km 104 Via Anhangüera), CEP-13069-380 Campinas/SP (BR).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **PAPES, Fabio** [BR/BR]; Rua James Clerk Maxwell, 320, Techno Park (Km 104 Via Anhangüera), CEP-13069-380 Campinas/SP (BR). **GERHARDT, Isabel Rodrigues** [BR/BR]; Rua James Clerk Maxwell, 320, Techno Park (Km 104 Via

Anhangüera), CEP-13069-380 Campinas/SP (BR). **AR-RUDA, Paulo** [BR/BR]; Rua James Clerk Maxwell, 320, Techno Park (Km 104 Via Anhangüera), CEP-13069-380 Campinas/SP (BR).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

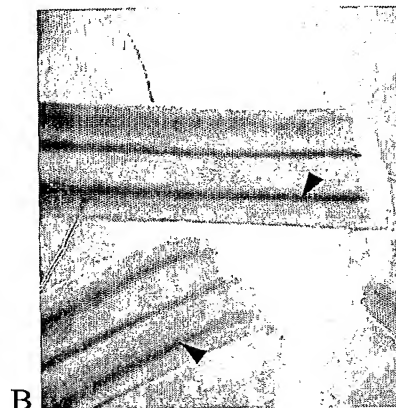
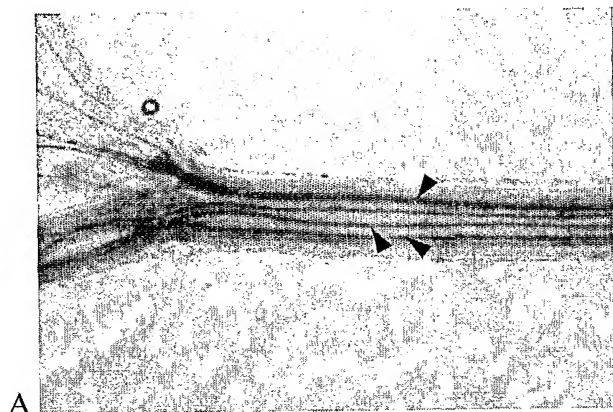
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report

[Continued on next page]

(54) Title: CAMBIUM/XYLEM-PREFERRED PROMOTERS AND USES THEREOF



(57) Abstract: The present invention relates to nucleic acid molecules corresponding to regulatory portions of genes whose expression is predominant in cambium and/or xylem. The invention also relates to compositions and methods of using the same to regulate the expression, in a cambium/xylem-preferred manner, of genes and/or any kind of nucleotide sequences in a plant. Nucleic acid molecules and its compositions include novel nucleotide sequences for cambium/xylem-preferred promoters identified and isolated from poplar (*Populus spp.*). Methods for expressing genes and/or any kind of nucleotide sequences in a plant using the promoter sequences disclosed herein are provided. The methods comprise stably incorporating into the genome of a plant cell a nucleotide sequence operably linked to a cambium/xylem-preferred promoter of the present invention and regenerating a stably transformed plant that expresses the nucleotide sequence.

WO 2005/096805 A2



---

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*